

## **Students + Teachers Collecting and Graphing Data**

### **EXCEL Portfolio Project**

**Problem:** Your building principal recently received the Benchmark Test scores for your school. He reports that the testing data suggests students are scoring poorly when asked to read and interpret a graph or chart. He wants every classroom teacher to design an assignment for his/her students that includes collection of data/information, creation of a chart or graph that best represents the data/information collected, and a list of questions that will require the students to understand and interpret the graph or chart.

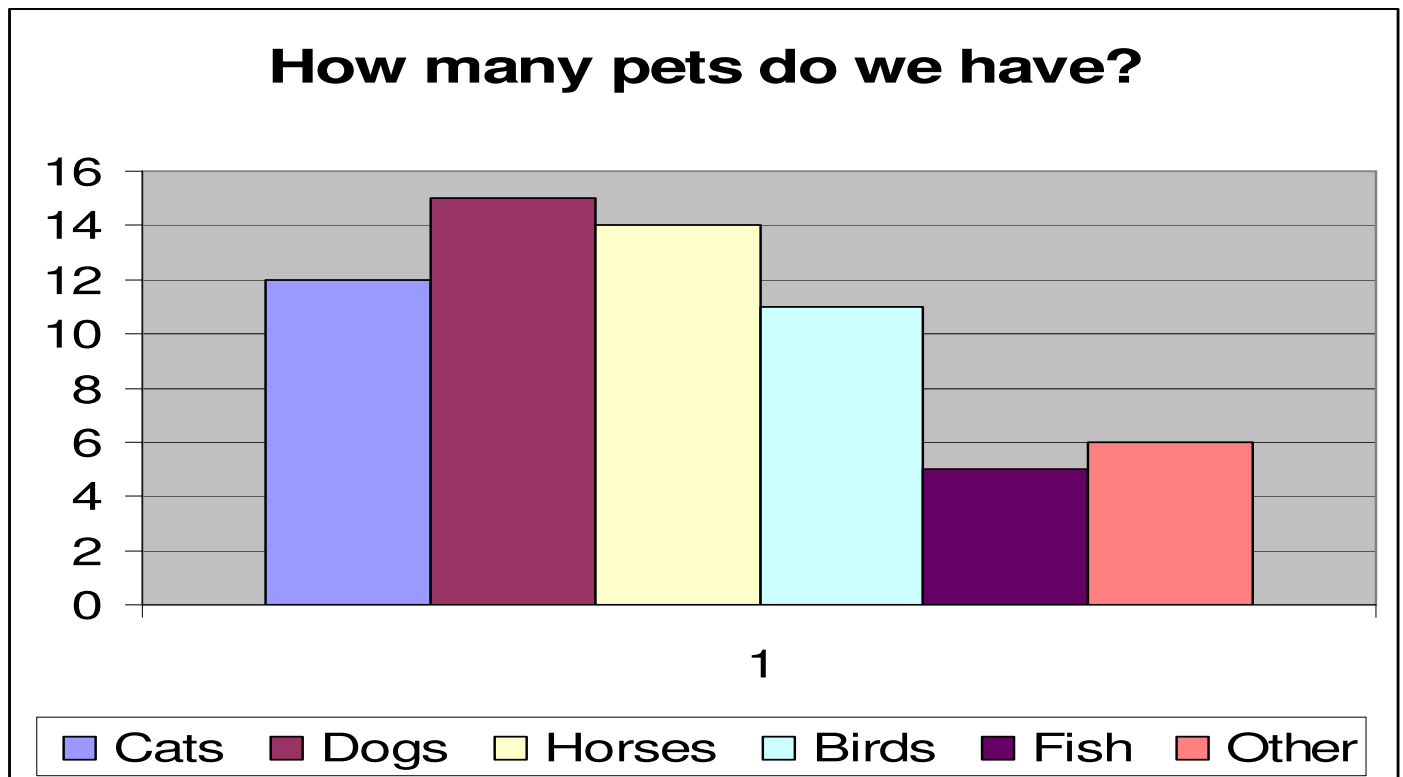
#### **Directions:**

1. Working with your partner(s), choose a topic that will interest the students in your classroom.
2. Develop and key a list of questions or create a survey your students will use to collect data/information from 15 other students or friends.
3. Now, imagine that **YOU** are a student in your class, and **YOU** have collected the data/information from those 15 students or friends. Using Microsoft EXCEL, create a table displaying the data/information **YOU** just collected (See example below). Students as early as second grade can enter the information in the table. Younger students may need some help or the teacher can enter the data as students observe. Your table must include at least one formula.
4. Create a graph or chart using the table you just created (See example below). When asked, make the graph or chart a part of the sheet where the table is displayed (As an object in . . .). Column or pie charts are good choices because they are easier for young people to read/interpret. Be sure your graph or chart is not split between two pages!
5. Develop a list of at least four questions your students should be able to answer by interpreting the graph or chart that was created from the data/information they collected. (See below)
6. In addition to the rubric that accompanies this assignment, **submit the following printed documents:** (1) the list of questions or survey “your students” used to collect data/information, (2) the table and graph(s) or chart(s) that were created, and (3) the list of at least four questions you developed for your students to answer as they demonstrated an understanding of the graph or chart they created. I will not deduct points if you print in black/white.

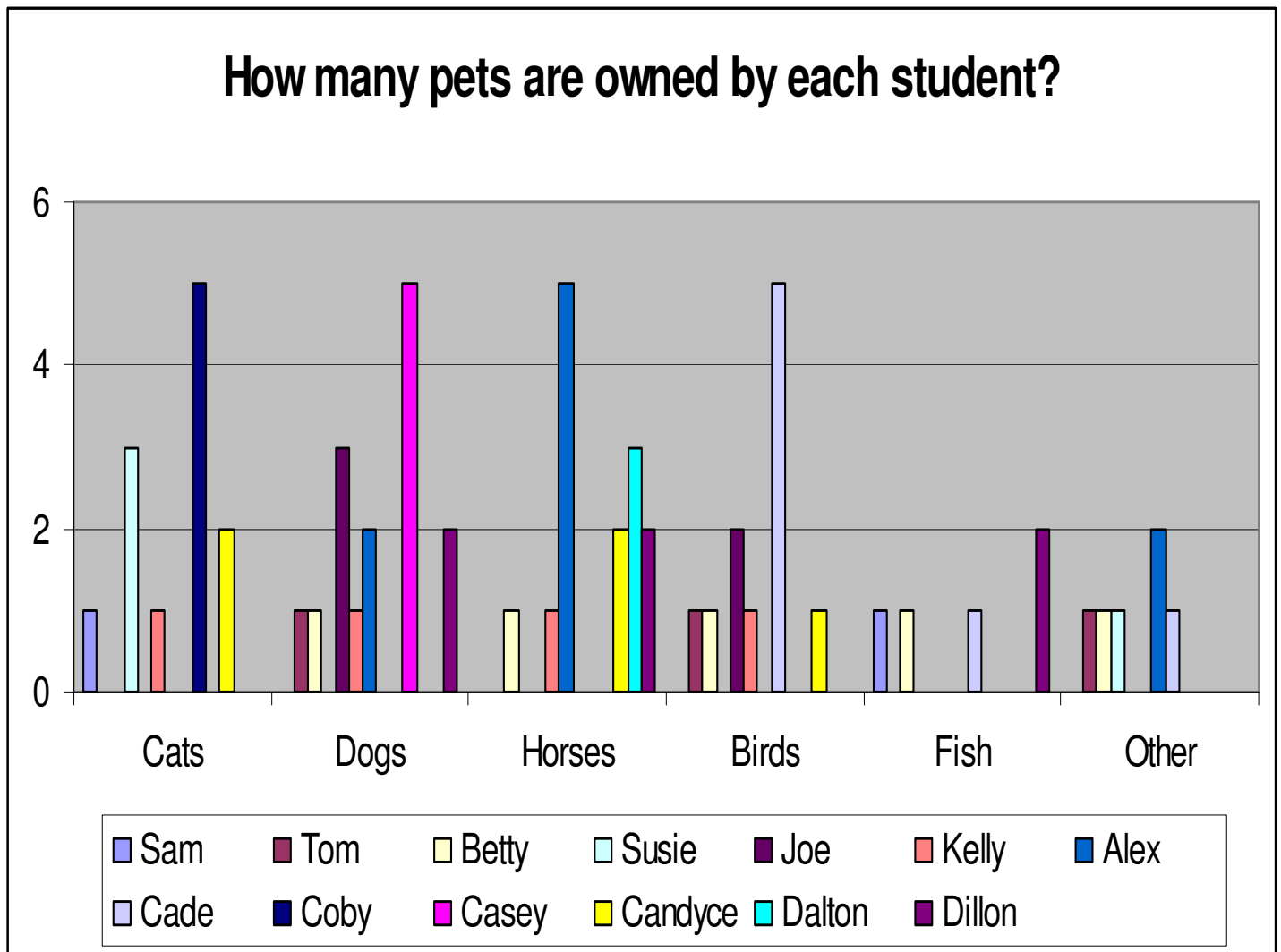
**Example Table** (This table was created in Microsoft EXCEL and copied/pasted into Microsoft WORD.)

Student	Cats	Dogs	Horses	Birds	Fish	Other
Sam	1				1	
Tom		1		1		1
Betty		1	1	1	1	1
Susie	3					1
Joe		3		2		
Kelly	1	1	1	1		
Alex		2	5			2
Cade				5	1	1
Coby	5					
Casey		5				
Candyce	2		2	1		
Dalton			3			
Dillon		2	2		2	
<b>Totals</b>	<b>12</b>	<b>15</b>	<b>14</b>	<b>11</b>	<b>5</b>	<b>6</b>

**Example Graph # 1** (The following graphs were created in Microsoft EXCEL and copied/pasted into Microsoft WORD.)



## Example Graph # 2



### Questions one might ask his/her students based on graph # 1:

How many cats does the class own?

Does the class own more birds or horses?

How many more horses do we own than cats?

### Questions one might ask his/her students based on graph # 2:

Who owns the most horses?

Who owns the most dogs?

How many cats does Susie own?

Does Casey own more dogs than Alex?

Student's Name \_\_\_\_\_

Class Period: \_\_\_\_\_

Team Member(s) Name(s) \_\_\_\_\_

## EXCEL Portfolio Project RUBRIC (Team Project) Students + Teachers Collecting and Graphing Data

MUST BE SUBMITTED WITH YOUR PROJECT FOR GRADING

After grading, place the project and scored rubric where you found the directions and rubric in your portfolio—behind the EXCEL tab.

Description	Point Value	Points Earned
✓ Grade/discipline specific topic of interest was selected	10	
✓ List of questions or survey was developed and submitted for grading	30	
✓ A minimum of 15 students provided data	30 (2 points each)	
✓ Microsoft EXCEL was used to create a table displaying the data or information from the survey	100	
✓ Microsoft EXCEL was used to create a graph(s) or chart(s) (Pie or Column) based on the information in the table	100	
✓ The graph or chart was displayed as an <b>object in</b> the sheet that contains the table	20	
✓ A list of questions (minimum of four) your students should be able to answer by understanding/interpreting the graph or chart was developed and submitted for grading	80 (20 points each)	
✓ The table and graph(s) and/or chart(s) were printed properly and submitted for grading (BLACK/WHITE IS ACCEPTABLE)	30	
✓ Appropriate titles for table and chart(s) or graph(s) were included	20	
✓ Formulas were used to calculate totals	40	
✓ Table was printed a second time with formulas displayed	40	
✓ Correct grammar, spelling, capitalization, and punctuation	-5 points for each error	
<b>Total Point Possible</b>	<b>500</b>	

**Note: This is a team project, but each team member must submit a rubric and save the files on his/her CD RW (electronic portfolio).**